

REMARKS/ARGUMENTS

Remarks Regarding Amendments

Claim 9 has been amended to more particularly characterize the first cavity forming part of the first sash frame interlacing configuration, specifically by reciting the cavity being open towards the lower horizontal master frame member (i.e. for accommodating an upper portion of the sash frame).

Claim 13 has been amended to define the second cavity in similar manner as the first cavity.

Applicant submits these amendments are fully supported by the application, for example, at Figures 7A and 8A (first cavity 205), and Figure 15 (second cavity 205). Applicant submits no new matter is added by this amendment.

Remarks Regarding s.112 Rejections

The Examiner rejected claims 12-16 under 35 U.S.C. 112 as being indefinite.

Applicant submits that the Examiner has construed claim 12 in a manner inconsistent with the plain claim language, with the specification, and with the interpretation that one of ordinary skill in the art would reach. Neither claim 7 nor claim 12 require removal of the sash frame by lowering the sash frame, as stated by the Examiner. In contrast, claim 7 provides a first sash frame interlacing configuration associated with the upper horizontal master frame member of the frame assembly introduced in claim 1 and further defined by claim 2. The structure of claim 7 is provided so that the sash frame can be lifted up relative to the master frame for installation and removal.

Claim 12 depends from claim 7 and includes all of the limitations of claim 12 and its parent claims. Thus in the frame assembly of claim 12, the same first sash frame interlacing configuration associated with the upper horizontal master frame member is provided, and the sash frame can be lifted up relative to the master

frame for installation and removal. Claim 12 introduces as an additional limitation the provision of a second sash frame interlacing configuration associated with the lower horizontal master frame member. However, this does not negate the lift-up feature of the structure defined by claim 7.

The structure of claim 12 can be understood with reference to the specification, for example, at Fig. 14 showing a first sash frame interlacing configuration 202 associated with upper horizontal master frame member 116 (portion 116a shown in Fig. 14), and a second sash frame interlacing configuration 202' associated with the lower horizontal master frame member 118' (portion of 118a' shown in Fig. 14). The second sash frame interlacing configuration is provided to facilitate optionally reversing the relative positions of the fixed and vent sides of the frame assembly, for example, to allow an installer to selectively mount the windows in a slide-right or slide-left configuration (c.f. paragraph 118 of the specification). However, Applicant respectfully submits that the invention defined by claim 12 does not contradict that of claim 7 as suggested by the Examiner, and that claims 12 – 16 satisfy the requirements of 35 USC 112. Withdrawal of this rejection is requested.

Double Patenting

The Examiner re-stated a provisional obviousness-type double patenting rejection of claims 1 – 16 in view of Applicant's co-pending Application Serial No. 11/229,839 combined with Davies (pgs. 2 – 4 of Office Action). The Examiner noted that Applicants had filed a terminal disclaimer on September 26, 2007, and stated it would be considered in due course. Applicant submits that this rejection is moot in view of the terminal disclaimer, and requests that the rejection be withdrawn.

Remarks Regarding s.102 Rejections

The Examiner rejected claims 1 and 17 as being anticipated by Arbetter (U.S. Patent No. 5,189,841).

Applicant respectfully submits that claims 1 and 17 cannot be considered anticipated by Arbetter because Arbetter fails to provide an enabling disclosure of the claimed subject matter, as required for such a s.102 rejection (In re Hoeksema, CCPA 1986). In contrast, Arbetter provides at best a mere naming or description of the subject matter, which cannot be produced without undue experimentation.

As a particular example, claim 1 recites an integrally unitary sash frame slidably mounted within an integrally moulded unitary master frame. The Examiner identified the window frame 60 and lower sash 140 of Arbetter as corresponding to the master frame and sash frame of claim 1. However, the Arbetter reference fails to teach one of ordinary skill how the sash is supported in the window frame.

A glance at the figures in the Arbetter reference quickly reveals that no figure shows details of any sash member in sliding engagement with a frame member. Presumably, the sashes 62, 64 in Fig. 4 are slidable within the frame 60, but Fig. 4 shows no details of how all the structural features of claim 1 are put together.

Turning to the text, at col. 7, lines 49 – 53, Arbetter teaches that the "outer surfaces of the sides 143, 145 of the sash [i.e. lower sash 140] are provided with vertically-extending parallel flanges 155, 157 arranged to slidably fit in respective tracks 71, 73 (see Figs. 5, 6) of the jambs in the window frame 60." This suggests that one flange (eg. flange 155) is received in one groove (eg. groove 71), and the other flange 157 is received in the other groove 73. However, the unitary moulded sash 140 could not possibly be installed in the unitary moulded window frame 60 - - the flanges 155, 157 would interfere with the sidewalls on either side of the channels 71, 73.

This interference can be readily understood by comparison to the state of the art prior to Arbetter's alleged contribution thereto.

A skilled person would know that in prior art double hung windows, each sash would typically be supported by pins extending laterally outwardly from upper and

lower points on each side of the sash, for engagement within grooves of a window frame. At least two of the pins (typically the top two) are retractable so that the sash can be installed and removed.

In Arbetter, the groove engaging flanges 155, 157 are integrally moulded and are clearly non-retractable relative to the rest of the sash frames. The flanges 155, 157 extend laterally outwardly along the entire height of the sash frame. Even if the flanges 155, 157 on one side of the sash could be inserted in the grooves 71, 73 (e.g. by tilting that side inwardly), the flanges 155, 157 on the other side would interfere with either the exterior surface 69 or the opposite interior surface 70, preventing installation of the sash in the window frame 60.

Arbetter does baldly mention provision of a tilt latch at col. 6, line 15, but no details of the position of such a tilt latch or its interaction with surrounding structure is provided. Further, providing a tilt latch does nothing to address the non-retractability of the flanges 155, 157 and the consequential inability to install the sash in the window frame.

Furthermore, positioning one flange 155, 157 in each groove 71, 73 would cause the lower sash 140 to interfere with the upper sash 62 (i.e. in Figure 4), rendering the sash 140 unslidable. A skilled person may conclude that both flanges 155, 157 of one sash (i.e. lower sash 140 or 64) are in one groove (e.g. groove 71), and both flanges 155, 157 of a second sash (i.e. sash 62) fit into the other groove 73. This interpretation seems consistent with Arbetter's teaching that each jamb has two vertical tracks 71, 73 defined therein for respective sashes 62, 64 of a double hung window (col. 6, lines 5-7). However, even with such an interpretation, the laterally extending flanges 155, 157 would still render installation into the frame 60 impossible.

Accordingly, Applicant submits that claim 1 cannot be considered anticipated by the Arbetter reference.

Regarding claim 17, Applicant submits that claim 17 also recites an integrally moulded sash frame slidably mounted within an integrally moulded master frame, and that claim 17 cannot be considered anticipated by Arbetter for the same reason provided above in regard to claim 1.

Furthermore, claim 17 recites seal support elements integrally moulded with the master frame. Applicant submits that Arbetter fails to disclose any structure corresponding to this claimed element. The Examiner indentified "seal support elements 70" in Arbetter, but reference character 70 in Arbetter refers to the rectangular inner surface of the frame 60 (col. 6, line 5). There is no teaching or suggestion that the inner surface 70 can in any way support seals as claimed in claim 17, and so Arbetter fails to disclose all of the claim limitations of claim 17. Applicant requests that the anticipation rejection of claim 17 be withdrawn for this additional reason.

Remarks Regarding s.103 Rejections

The Examiner rejected claims 1-16 as unpatentable over Davies (U.S. Pat. No. 5,280,686) in view of Kownacki et al. (U.S. Pat. No. 6,749,797). Claims 17 and 21-23 were rejected as unpatentable over Japanese Patent Publication 2002-227551 in combination with Kownacki et al.

Referring to the claims 1 – 16 rejection, Applicant submits that the Kownacki '797 reference fails to qualify as prior art against at least claim 1 of the present application. The Kownacki '797 reference was issued on June 15, 2004, from an application published on August 7, 2003. This fails to pre-date the effective date of the present application which claims priority to a provisional application filed March 27, 2003. Applicant submits that the subject matter of claims 1 – 16 are fully supported under the first paragraph of 35 USC 112 by the provisional application. Withdrawal of this rejection is requested.

In the event that Applicant is mistaken and Kownacki '797 does qualify as prior art (which Applicant submits it does not), then Applicant respectfully submits that

the combination of Davies and Kownacki '797 fails to meet the requirements for establishing a prima facie case of obviousness, for at least the reason that the asserted combination fails to make obvious the invention as a whole as defined by any one of the rejected claims.

Claim 1, for example, recites an integrally moulded unitary sash frame slidably mounted within an integrally moulded unitary master frame. Davies discloses a window with a sliding sash, but the window and sash frames are not integrally moulded. Kownacki '797 discloses injection moulding a sash frame and a window frame, but for a casement window in which the sash is pivotally attached to the window frame (e.g. by hinges).

There is no evidence that one skilled in the art would have any expectation of success with regard to injection moulding the frames 10 and 12 of Davies using the moulding process of Kownacki '797. In fact, one can readily observe that there would be no chance of success. The outer frame 10 of Davies includes upper and lower horizontal members 15 and 16 (Fig. 2), and left and right jamb members 13 and 14 (Fig. 1), the profiles of which can be seen in the figures as noted. While the profiles for the members 13, 14, 15 and 16 can be made by an extrusion process, they cannot be made by injection moulding because the moulded part (with its hollow chambers) could not be ejected from the mould (i.e. step 97 of '797). The profiles of the sliding sash 12 in Davies similarly cannot be integrally made by the injection moulding process of Kownacki '797. Withdrawal of the rejection of claim 1 (and those claims which depend therefrom) is respectfully requested for this additional reason.

Applicant submits that claims 2 – 16 depend directly or indirectly from claim 1, and are allowable in that they depend from a base claim that Applicant contends is allowable.

Applicant further relies on Applicant's previous arguments as set out in previous responses regarding the limited applicability of the Davies reference in relation to the patentability of claims 2 – 16.

Moreover, Applicant submits that claims 9 and 13 as presently amended define subject matter that is clearly distinguished from Davies, for example, from any cavity in Davies as identified by the Examiner.

Claims 17 and 21 – 23 were rejected as obvious under JP 2002-227551 (Tai) in view of Kownacki '797.

Applicant submits that the rejection of claim 17 ought to be withdrawn for at least the reason that the Kownacki reference does not pre-date the effective filing date of the present application and fails to qualify as prior art at least in respect of claim 17.

Regarding the Tai reference (JP 2002-227551), Applicant notes that the Examiner has provided a significantly detailed interpretation of that reference, particularly at pages 8 and 9 of the Office Action. Unfortunately, because the reference is in the Japanese language, Applicant cannot verify the accuracy of the details asserted by the Examiner and is in a disadvantaged position with regard to making a full analysis thereof and informed response thereto.

Applicant reminds the Examiner that MPEP 706.1(II) states that, in reference to reliance on foreign language documents in support of a rejection: "If the document is in a language other than English and the Examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the Examiner is relying upon in support of the rejection".

Applicant respectfully submits that the Examiner's reliance on details of the Japanese Tai reference in the absence of an English language translation fails to satisfy the Examiner's burden under, for example, 35 USC 132. Applicant requests that such a translation be provided, or alternatively, that any rejections based on this reference be withdrawn.

Alternatively or additionally, Applicant respectfully submits that the rejections of claims 17 and 21 – 23 under the Japanese Tai reference in view of Kownacki be withdrawn for failure to establish a prima facie case of obviousness. Applicant

submits the combination fails to establish a prima facie case of obviousness for the same reason that the combination of Davies and Kownacki fails to do so in regard to claim 1 (as discussed above). For example, one skilled in the art would readily recognize that the profiles of members 51, 52, 53 and 55 of sash 50 (of Tai) could not be made by the injection moulding process of Kownacki because, for example, an integral moulded frame comprised of those profiles could not be ejected from a mould.

Furthermore, Applicant continues to rely on Applicant's previous arguments set out in previous Responses regarding the limited applicability of the Japanese Tai reference in relation to the patentability of the rejected claims.

Applicant respectfully submits that this application is in condition for allowance.

Respectfully submitted,

PETTA ET AL.

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